

### REMARKS

Claims 1-21 are pending. The Examiner's reconsideration of the rejections is respectfully requested in view of the amendments and remarks.

Applicant gratefully acknowledges the Examiner's indication that claims 6, 14, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1 and 3 have been rejected under 35 U.S.C. 102(b) as being anticipated by Sundar et al. (U.S. Patent No. 6,198,976). The Examiner stated essentially that Sundar teaches all of the limitations of claims 1 and 3.

Claim 1 recites, *inter alia*, "determining the circle upon determining a connectivity of the first and second pair of edge points."

Sundar teaches a method for finding the center of a substrate (see Title of the Invention). Sundar does not teach determining a circle in a region of interest, much less, "determining the circle upon determining a connectivity of the first and second pair of edge points" as claimed in claim 1. In the Response to Arguments the Examiner has provided several examples of where Sundar teaches determining a center of a circle. However, determining the center of a circle is believed to be distinct from determining the circle itself. Nowhere does Sundar teach determining a circle. Sundar teaches that the circular shape of the substrate can be assumed (see col. 9, lines 59-63 and col. 10, lines 43-49). Thus, Sundar merely determines a center of a substrate based on an assumption that the substrate is circular. No determination of a circular substrate is made. For example, assuming that the system and method of Sundar received a square substrate, the system and method would determine its center using formulas that assume

that the substrate is a circle without determining that the actual shape of the substrate is not a circle. No determination of the shape of the substrate is performed. Sundar does not teach determining a circle upon determining a connectivity of the first and second pair of edge points as claimed in claim 1. Therefore, Sundar does not teach every limitation of claim 1.

Claim 3 depends from claim 1. Claim 3 is believed to be allowable for at least the reasons given for claim 1. The Examiner's reconsideration of the rejection is respectfully requested.

Claims 8, 9, 15, 19, and 20 have been rejected under 35 U.S.C. 102(b) as being anticipated by Palmquist et al. (U.S. Patent No. 5,179,419). The Examiner stated essentially that Palmquist teaches all the limitations of claims 8, 9, 15, 19, and 20.

Claim 8 claims, *inter alia*, "determining the circle by verifying a connectivity of adjacent edge points in a gradient array of the image; and verifying the circle by comparing radiuses from at least two edge points to the intersection." Claim 15 claims, *inter alia*, "computer readable program code for causing the computer to determine the circle by verifying a connectivity of adjacent edge points in a gradient array of the image; and computer readable program code for causing the computer to verify the circle by comparing radiuses from at least two edge points to the intersection."

Palmquist teaches a method for detecting, classifying and quantifying defects in terminated optical fibers (see col. 4, lines 63-68). Palmquist does not teach verifying the circle by comparing radiuses from at least two edge points to the intersection, as claimed in claim 8, and essentially as claimed in claim 15. Palmquist's method determines defects in an optical fiber. While the fiber of Palmquist happens to be circular, nowhere does Palmquist teach verifying a shape of the optical fiber to be a circle. Rather Palmquist teaches applying a circular mask to an image to separate an optical fiber from a background (see col. 10, lines 30-37). The mask forces

a circular shape onto the image such that the defect detection system and method of Palmquist can assume a circular shape of the optical fiber. Thus, no verification of a circle is needed and no verification of a circle is taught. Therefore, Palmquist fails to teach verifying the circle by comparing radiuses from at least two edge points to the intersection, as claimed in claim 8 and essentially as claimed in claim 15.

Claims 9 and 19 depend from claim 8. Claim 20 depends from claim 15. The dependent claims are believed to be allowable for at least the reasons given for claims 8 and 15. The Examiner's reconsideration of the rejection is respectfully requested.

Claims 12, 13, 16, and 17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Palmquist as applied to claims 1, 8, and 15, and further in view of Yamagata (U.S. Patent No. 6,201,222). The Examiner stated essentially that the combined teachings of Palmquist and Yamagata teach or suggest all the limitations of claims 12, 13, 16, and 17.

Claims 12 and 13 depend from claim 8. Claims 16 and 17 depend from claim 15. The dependent claims are believed to be allowable for at least the reasons given for the independent claims, respectively. The Examiner's reconsideration of the rejection is respectfully requested.

Claims 2, 10, and 11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar and Palmquist as applied to claims 1 and 8, and further in view of Huber (U.S. Patent No. 4,523,188). The Examiner stated essentially that the combined teachings of Sundar, Palmquist and Huber teach or suggest all the limitations of claims 2, 10, and 11.

Claim 2 depends from claim 1. Claims 10 and 11 depend from claim 8. The dependent claims are believed to be allowable for at least the reasons given for the independent claims, respectively. The Examiner's reconsideration of the rejection is respectfully requested.

Claim 7 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar. The Examiner stated essentially that Sundar teaches all the limitations of claim 7.

Claim 7 claims, *inter alia*, “wherein the region of interest is selected manually.”

Sundar teaches that a controller can determine the location of the center of a substrate (see col. 6, lines 31-35). Sundar does not teach selecting a region of interest manually, essentially as claimed in claim 7. Determining a center of a substrate is distinct from selecting a region of interest. Clearly, a center of a substrate is not a region of interest. Rather, the region of interest includes a circle (see claim 1). Sundar’s center of the substrate does not include the circle. Therefore, Sundar does not teach selecting a region of interest, essentially as claimed in claim 1. Therefore, Sundar fails to teach all the limitations of claim 1. The Examiner’s reconsideration of the rejection is respectfully requested.

Claims 4 and 5 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar as applied to claim 1, and further in view of Yamagata (U.S. Patent No. 6,198,976). The Examiner stated essentially that the combined teachings of Sundar and Yamagata teach or suggest all the limitations of claims 4 and 5.

Claims 4 and 5 depend from claim 1. The dependent claims are believed to be allowable for at least the reasons given for claim 1. The Examiner’s reconsideration of the rejection is respectfully requested.

New claim 21 claims, “verifying the circle by comparing radiuses from at least two edge points to the intersection.” Claim 21 depends from claim 1. Claim 21 is believed to be allowable for at least the reasons given for claim 1. Claim 21 is believed to be allowable for additional reasons.

Sundar teaches determining a center of a substrate. Sundar does not teach determining a circle, much less verifying the circle by comparing radiuses, essentially as claimed in claim 21. Sundar determines a center of a substrate and a radius (see col. 10, lines 27-33). However, Sundar does not verify the circle by comparing radiuses. Sundar assumes a circular substrate (see above). Thus, Sundar does not determine, much less verify, a circle. Therefore, Sundar fails to teach all the limitations of claim 21.

Accordingly, claims 1-21 are believed to be allowable for at least the reasons stated. The Examiner's reconsideration of the rejections is respectfully requested. For the forgoing reasons, the application is believed to be in condition for allowance. Early and favorable reconsideration is respectfully requested.

Respectfully submitted,

Dated: April 28, 2004

By: Donald B. Paschburg  
Donald B. Paschburg  
Reg. No. 33,753  
Attorney for Applicants

**SIEMENS CORPORATION**  
Intellectual Property Department  
5<sup>th</sup> Floor  
170 Wood Avenue South  
Iselin, New Jersey 08830  
(732) 321-3191  
(732) 321-3030 (FAX)